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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/447,419	11/23/1999	HARUO TANAKA	040894-5507	3789

9629 7590 05/23/2003

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EXAMINER

SANTIAGO, MARICELI

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Applicant No.	Applicant(s)
	09/447,419	TANAKA, HARUO
	Examiner	Art Unit
	Mariceli Santiago	2879

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 07 March 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1,2 and 5-12 is/are pending in the application.

4a) Of the above claim(s) 6-11 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,2,5 and 12 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on 10 September 2001 is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ . 6) Other:

**DETAILED ACTION**

***Response to Amendment***

The Amendment, filed on March 7, 2003, has been entered and acknowledged by the Examiner.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a), which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glaser (US 4,303,847) in view of Ohnuma et al. (US 5,118,986).

Regarding claim 1, Glaser discloses a flat panel display comprising a sealing member for sealing the flat panel display structure and covering the panel with the sealing member, wherein the sealing member is further comprised of an aluminum material (18, Column 4, lines 30-38) and an absorbing material made of porous aluminum oxide (12, Column 7, lines 9-22) coating the inside surface of the aluminum material. The absorbing porous layer, along some advantages, protects the aluminum material against any damage during assembly of the aluminum material and insulates the flat panel structure from the aluminum material. While Glaser exemplifies the sealing assembly for use in a gas filled display device, Glaser further discloses the general use and suitability of the sealing member in various types of flat panel displays which generally employ a transparent glass sheet as front face of the panel, inclusive EL panels (Column 1, lines 8-12). Glaser fails to disclose the components of the EL device as claimed. However, EL devices are well known flat panel displays generally comprising a lower

electrode (2) formed on a substrate, an organic EL layer formed on the lower electrode (5, 6), and an upper electrode (3) formed on the organic EL layer as evidenced by Ohnuma. Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to use a sealing assembly disclosed by Glaser for use in EL panels, inclusive organic EL devices comprising the components as disclosed by Ohnuma, since Glaser teaches the use and general suitability of the sealing member in flat panel displays.

Regarding claim 2, Glaser discloses a flat panel display (see Fig. 2) wherein the aluminum material (Column 4, lines 33-38) is a flexible aluminum sheet (18).

Regarding claim 5, the Examiner notes that the claimed limitation "the aluminum sheet is formed in such a manner that a surface of the aluminum oxide layer is subjected to gas flow-out treatment in vacuum, and thereafter the lower electrode, EL layer and upper electrode are sealed on the substrate in an atmosphere of inert gas" is drawn to a process of manufacturing which is incidental to the claimed apparatus. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. In spite of the fact that a product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Further, patentability of a claim to a product does not rest merely on the difference in the method by which the product is made, rather, it is the product itself which must be new and not obvious. As such, no patentable weight has been given to the process recited in claim 1 (see MPEP 2113). Furthermore, Glaser discloses all the elements of the flat panel display being sealed on the substrate in an atmosphere of inert gas (Column 2, lines 39-63).

Regarding claim 12, Glaser discloses the claimed invention except for the limitation of the sealing member having a thickness of approximately 10  $\mu\text{m}$ . However, the thickness of the sealing member is related to the capacity of the sealing member to perform the appropriate

sealing aspect, thus a required thickness can be obtained by undue experimentation to discover the optimum value for such requirement. Accordingly, discovering an optimum value of a result effective variable involves only routine skill in the art. It would have been obvious to one of ordinary skills in the art at the time the invention was made to provide sealing member having a thickness of approximately 10  $\mu\text{m}$ , since discovering an optimum value of a result variable is considered within the skills of the art.

***Response to Arguments***

Applicant's arguments filed March 7, 2003 have been fully considered but they are not persuasive.

In response to Applicant's arguments that the Prior Art of record fails to disclose an absorbing porous layer coating the aluminum sheet since Glaser ('847) discloses that the absorbing layer and the aluminum sheet are individual components of the flat-panel display, the Examiner respectfully disagree. It is considered within Glaser's teaching the use of the porous layer as a coating blanket for the inside surface of the aluminum sheet in order to protect the aluminum sheet against any damage during assembly and insulate the aluminum sheet from the flat panel display. Accordingly, it is the Examiner's position that the porous layer functions as a coating for the inside of the aluminum sheet.

Furthermore, the Applicant argues that there is no motivation to combine the flat-panel display of Glaser with the organic EL display of Ohmuna. The Examiner notes that Ohmuna reference is relied on to exemplify the common structural components of an organic EL device and not to teach a particular sealing assembly of an organic EL device. On the other hand, the Examiner relies on Glaser's teaching of the suitability of his sealing assembly in several types of flat-display panels, inclusive EL devices. Accordingly, Glaser's teaching pertains to a sealing

assembly for several flat panels, inclusive organic EL devices of the general structure taught by Ohmuna.

For the reasons stated above the rejection of claims 1, 2 and 5 are deemed proper.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (703) 305-1083. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7382. Additionally, the following fax phone numbers can be used during the prosecution of this application (703)

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872-9318 (for response before a Final Action) and (703) 872-9319 (for response after a Final Action).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

(Wtgs 5/16/03)  
Mariceli Santiago  
Patent Examiner  
Art Unit 2879

*(Signature)*  
NIMESHKUMAR D. PATEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800